3 c Studies 2

Ontario Department of Labour The Honourable Dalton Bales, Q.C., Minister T.M. Eberlee, Deputy Minister

Research Branch September 1970

The Short-Run Impact of the Thirty Cent Revision in Ontario's Minimum Wage on Five Industries





Digitized by the Internet Archive in 2024 with funding from University of Toronto

-70NO3

Ontario Department of Labour The Honourable Dalton Bales, Q.C., Minister T.M. Eberlee, Deputy Minister

Research Branch September 1970

The Short-Run Impact of the Thirty Cent Revision in Ontario's Minimum Wage on Five Industries

Prepared by Henry Fantl and Frank Whittingham Ornite Department of Labour Tribe Off, Marcon Tollin, Col., Marcon Tolli

Describ Heart

The Short-Run Impact of the Thirty Cent Revision in Omario's Minimus Wage on Five Industries

Property Visual Street

CONTENTS

	Page
Foreword	
Introduction	1
Characteristics of the Industries Surveyed	4
Survey Design	11
Direct Impact of the 1969 Minimum Wage Revision	13
Impact on Distributions of Employees by Hourly Wage Rate	13
Causes of Hourly Rate Increases	22
Impact on Average Hourly Earnings and Wage	
Differentials	28
Short-Run Adjustments to Increased Labour Costs	. 34

STATUTE OF THE PARTY.

LIST OF TABLES

Table		Page
1.	Average Annual Wages and Average Hourly Wages of Production and Related Workers for Selected Industries, Ontario, 1966	5
2.	Female Production and Related Workers as a Proportion of All Production and Related Workers for Selected Industries, Ontario, 1966	6
3.	Distribution of Establishments by Number of Non-Supervisory Employees for Selected Industries, Ontario, November, 1969	7
4.	Wages of Production and Related Workers as a Percentage of Cost of Materials and Supplies for Selected Industries, Ontario, 1966	8
5.	Value Added by Manufacturing Activities Per Man Hour of Production and Related Workers for Selected Industries, Ontario, 1966	8
6	Corporation Profits as a Percentage of Value of Shipments of Goods of Own Manufacture for Selected Industries, Canada, 1964 - 68	9
7	Value of Exports and Imports of Selected Products, Canada, 1968	10
8	Employment Indexes for Selected Months for Selected Industries, Canada 1966-69	14
9	Non-Supervisory Employees by Sex for Selected Industries, Ontario, November 1968 and January	
	1969	15

Table		Page
10	Percentage Distribution of Non-Supervisory Employees by Sex and Wage Class for Selected Industries, Ontario, November 1968 and January 1969	16 17
11.	Percentage Distribution of Non-Supervisory Employees by Office and Non-Office and Wage Class for Selected Industries, Ontario, November 1968 and January 1969	19 20
12.	Proportion of Non-Supervisory Employees Under \$1.30 Per Hour by Size of Establishment for Selected Industries, Ontario, November, 1968	21
13.	Proportion of Non-Supervisory Employees under \$1.30 Per Hour by Size of Community for Selected Industries, Ontario, November 1968	22
14.	Distribution of Employees by Cause of Hourly Rate Increase between November 1968 and January 1969 for Selected Industries, Ontario	23
15.	Percentage Distribution of Employees with an Observed Hourly Rate Increase by Cause of Increase and Wage Class as of November 1968 for Five Selected Industries, Ontario	25
16.	Distribution of Employees with an Hourly Rate Increase between November 1968 and January 1969 Attributable to the Minimum Wage	
	Revision by Pay System for Selected Industries, Ontario	26
17.	Proportion of Employees with an Hourly Rate Increase between November 1968 and January 1969 Attributable to the Minimum Wage	
	Revision by Size of Establishment for Five Selected Industries, Ontario	27

Lable		Page
18.	Average Hourly Earnings by Sex for the Manufacturing Sector and Selected Industries,	20
	Ontario, November 1968 and January 1969	29
19.	Absolute and Percentage Average Hourly Wage Differentials between the Manufacturing Sector and Selected Industries, Ontario, November 1968 and January 1969	31
20.	Absolute and Percentage Average Hourly Wage Differentials between Males and Females for Selected Industries, Ontario, November 1968 and January 1969	32
	January 1707	24
21.	Office-Non-Office Average Hourly Wage Differentials for Selected Industries, Ontario, November 1968 and January 1969	33
22.	Distribution of Employees Laid Off between November 1968 and January 1969 by Sex and Reason for Lay-Off for Five Selected Industries, Ontario	36
23.	Distribution of Employees Laid Off between November 1968 and January 1969 by Sex and Wage Class for Five Selected Industries, Ontario	36
24.	Distribution of Employees Laid Off between November 1968 and January 1969 by Sex and Length of Employment Prior to Lay-Off for Five Selected Industries, Ontario	37
25.	Distribution of Employees Laid Off between November 1968 and January 1969 by Sex and Marital Status for Five Selected Industries, Ontario	37
	Omario	31

Table		Page
26.	Distribution of Employees Laid Off and New Hires between November 1968 and January 1969 by Wage Class and Sex for Five Selected	
	Industries, Ontario	39
27.	Distribution of Employees Laid Off and New Hires between November 1968 and January 1969 by Age and Sex for Five Selected Industries,	
	Ontario	40

FOREWORD

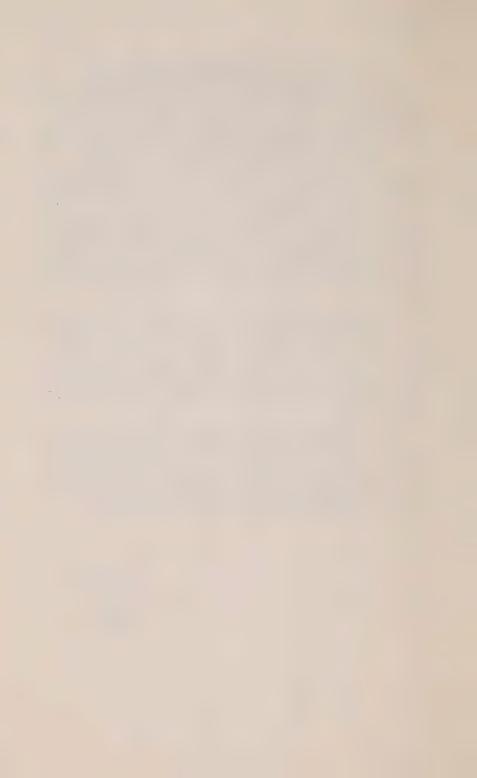
Present knowledge about the effects of Ontario's minimum wage programme is very limited. For example, when the minimum wage is increased, which represents an increase in labour costs for affected employees, what is the impact on wage structures. Also, to what extent are there changes in employment, output and product prices.

To obtain a better understanding of these matters a special study has been undertaken of the impact on selected industries in Ontario of the revision in the Province's minimum wage from \$1.00 to \$1.30. This increase became effective in January 1969. The overall study is based on information collected for three time periods - immediately before the thirty cent increase, immediately after, and a third point in time approximately twelve months after the revision. This approach should permit an evaluation of both the short-run and longer run effects.

In this report an analysis of the short-run impact of the thirty cent revision is presented. It is based on data for the first two points in time, and contains an examination of the employees directly affected by the revision and the consequent effect on wage structures. Also, the related changes in average hourly earnings are examined and employer adjustments in the short-run to an increase in labour costs are briefly discussed.

Two members of the Research Branch, Henry Fantl, Research Economist, and Frank Whittingham, Chief Research Officer, Manpower and Standards, had primary responsibility for the special survey used to generate the data, and they prepared the report. Other staff members participated by assisting in the field survey work and by providing clerical and secretarial services.

JOHN KINLEY, Director, Research Branch.



INTRODUCTION

There is a long standing debate among economists and other interested parties over the use of a statutory minimum wage to assist low-wage workers who have little bargaining power. While no one is opposed to the social objective of assisting low-wage workers, there exists a great deal of disagreement over the extent to which placing a floor under the wage structure creates undesirable side-effects. Examples of potential negative side-effects are higher unemployment among workers directly affected by a minimum wage, elimination of entry level jobs for new labour force entrants, and higher product prices.

The possibility of negative side effects arises because an upward revision in a minimum wage represents an arbitrarily imposed increase in labour costs for the employers who are affected. If employer adjustments involve laying off their least productive employees, using more capital and less labour or other mechanisms that lead to a reduction in employment, there could be a decline rather than an improvement in the welfare of some workers. It is easy to put forward deductive arguments that support either the prediction of dire consequences of a minimum wage programme or the prediction that adverse effects will be minimal. It is extremely difficult, however, to validate them.

Two ingredients have provided fuel for the controversy. These are the different economic models used by the parties to the debate and measurement problems. Those who have predicted serious consequences from placing a wage floor under the labour market rely upon orthodox economic theory and postulate an inverse relationship between wage rates and employment. Consequently, an arbitrary increase in wage rates, while other things remain constant, will lead to a reduction in employment. Opponents of this position argue that the demand for labour is not as sensitive to wage changes as the classical economist would have one believe. For example, if there are situations where employers are paying a wage less than the contribution labour

¹ For a review of the debate and the evidence concerning the effects of a minimum wage programme see: John M. Peterson and Charles T. Stewart Jr., <u>Employment Effects of Minimum Wage Rates</u> (Washington: American Enterprise Institute, 1969).

makes in the production process an increase in the minimum wage would improve a worker's position and would not lead to a reduction in employment. Also, it has been argued that the negative relationship between higher wage rates and employment is not a very close one because a great deal of inefficiency exists in industry. As a result, in a dynamic economy, the shock of a higher wage rate legislated by government will compel employers to improve their production systems, thereby improving labour productivity and offsetting the impact of higher labour costs².

Empirical work to assess the merits of the conflicting predictions has not settled the debate to the satisfaction of all concerned. A primary reason for this situation is the difficulty of isolating the effects of a minimum wage. A floor rate is usually increased in small steps and in relative terms affects directly only a small group of employers and employees. Also, the possible adjustment channels open to firms affected by a minimum wage change are varied. For example, a firm might absorb the increase in labour cost, raise product prices, improve management efficiency, improve labour efficiency or substitute capital for labour. Further, when trying to isolate the effects of a minimum wage in a dynamic economy factors other than the minimum that can affect the variables under study are operative. In summary, one is attempting to isolate the impact of a very small disturbance that may be dissipated through a number of channels in a dynamic economic system.

In Ontario, a minimum wage programme has been in effect since 1921. While initially designed to assist female workers, the programme was gradually extended to cover males³, and by 1965 a universal hourly minimum wage became effective with no sex, area or industry differentials⁴. Although the programme has expanded significantly, little work has been undertaken in Ontario to investigate its various potential effects. To partially bridge this gap, the Research

² Ibid., pp. 7-8.

³ For a review of the history of Ontario's minimum wage programme, see: Frank Whittingham, Minimum Wages in Ontario (Kingston: Industrial Relations Centre, Queen's University, March, 1970) pp. 3-9.

With respect to industry differentials, the only exception to the policy of setting a general minimum wage is the practice of setting a higher minimum rate for the Construction Industry.

Branch of the Ontario Department of Labour has initiated a special study to assess in five selected low wage industries the effects of the thirty cent increase in the Province's minimum wage that became effective in January 1969.

The overall study, that will result in two reports, has been designed to permit an analysis based on three points in time: a reference period just prior to the effective date of the thirty cent adjustment and a third period in time approximately one year after the increase became effective. Hopefully, through this approach an insight into both the short-run and longer run effects of a minimum wage increase can be obtained.

In this first report, an analysis of the immediate impact of the thirty cent revision is presented based on data for November 1968 and January 1969. Of critical interest is the effect of the change on wage structures. A discussion of adjustments undertaken by employers and data on employment are also presented; but a detailed analysis of these aspects is deferred until data from the January 1970 survey are available. This deferment is based upon two considerations. First, the time period between the introduction of the thirty cent revision, January 1, 1969, and the second reference period, January 18, 1969, is too short to permit a detailed analysis of adjustments. Second, the seasonal fluctuation in output and employment between November and January in the selected industries clouds the analysis of employment effects. An adequate examination of this aspect can only be undertaken using data for January 1969 and January 1970.

Before turning to the data for November 1968 and January 1969, two short background sections are presented. This first contains a description of the industries selected for analysis, and the second provides a description of the special survey.

⁵ The three periods used for the special surveys to generate the required data were the payroll periods ending November 30, 1968, January 18, 1969, and January 17, 1970.

⁶ In addition to the increase in the minimum wage from \$1.00 to \$1.30 per hour, a mandatory premium rate of one and one-half times a worker's regular straight-time hourly rate after weekly hours of 48 became effective in Ontario in January 1970. An analysis of this aspect will also be presented in a second report based on data for January 1969 and January 1970.

CHARACTERISTICS OF THE INDUSTRIES SURVEYED

The following five industries were selected for analysis:

Shoe Factories;

Luggage, Handbag and Small Leather Goods Manufacturers;

Hosiery Mills;

Children's Clothing Industry;

Foundation Garment Industry.

These industries were chosen in light of two factors. Given a resource constraint, the industries had to be small enough to permit the collection of detailed data. Also, they had to be sensitive to an upward revision in the minimum wage. They meet both these criteria. As of February 1969, the five industries contained a total of 219 establishments and, as will be demonstrated in this section, they have the characteristics one usually associates with low-wage industries.

Generally, in low-wage industries there are a large number of firms operating on a small scale, there is ease of entry because of low capital requirements and the final product market is very competitive. In addition, females constitute a high proportion of the work force and the ratio of labour costs to total costs is very large.

The average annual and average hourly wages for production and related workers in the five selected industries are compared with similar averages for Ontario's manufacturing sector in Table17. These data reveal the below average position of wage earners in the five industries. In 1966, the average annual wage for production and related workers in the Province's manufacturing sector was \$5,034. In contrast, the average in each of the survey industries was markedly lower. The lowest, \$2,819 per annum, occurred in Children's Clothing. Similarly, when average hourly wages are compared wages for production and related workers in the selected industries fall below the average wage in the manufacturing sector.

There are a number of factors underlying the lower average hourly wages in the survey industries. Some of these are the sex composition of the work force, the productivity of the work force and conditions in the product markets. These factors are discussed below.

Most of the data used in this background section has been taken from the Dominion Bureau of Statistics' Annual Census of Manufacturers for 1966.

Table 1

Average Annual Wages and Average Hourly Wages of Production and Related Workers for Selected Industries, Ontario, 1966

Industry	Average Annual Wage	Average Hourly Wage
	\$	\$
Manufacturing	5,034	2.36
Shoe Factories Luggage, Handbag and Small Leather	3,241	1.62
Goods	3,247	1.57
Hosiery Mills	3,263	1.57
Children's Clothing	2,819	1.44
Foundation Garment	3,104	1.50

Source: Manufacturing Industries of Canada, Section D, Province of Ontario, 1966, Cat. No. 31-206, Dominion Bureau of Statistics, Ottawa.

The data in Table 2 indicate that females are much more important in the industries chosen for analysis than in the overall manufacturing sector. As of 1966, females constituted well over one-half of all production and related workers in each of the five industries, and were most important in the Foundation Garment Industry where the proportion reached 88.7 per cent. In contrast, females comprised approximately one-fifth of production and related workers in the manufacturing sector.

The importance of small establishments among the survey industries, which, in part, reflects ease of entry, is shown by the size of establishment data in Table 3. Of the 219 establishments in these five industries, 58.9 per cent of them employed fewer than 50 non-supervisory employees as of November 1968 and 23.7 per cent had 9 or less non-supervisory employees on their payrolls. Within these five industries, establishments tended to be largest in Shoe Factories where 26 of the 71 establishments surveyed had 100 or more employees.

To obtain an adequate measure of labour costs as a proportion of total costs is extremely difficult. A statistic that may provide some insight into this aspect, however, is wages of production and related

Table 2

Female Production and Related Workers as a Proportion of All Production and Related Workers for Selected Industries, Ontario, 1966

Industry	Female Proportion of Production and Related Workers
Manufacturing	21.5
Shoe Factories	59.0
Luggage, Handbag	
and Small Leather	
Goods	64.4
Hosiery Mills	72.7
Children's Clothing	86.4
Foundation Garment	88.7

Source: Manufacturing Industries of Canada, Section D, Province of Ontario, 1966, Cat. No. 31-206, Dominion Bureau of Statistics, Ottawa.

workers as a percentage of the costs of materials and supplies. The labour intensive nature of the survey industries is brought out when this statistic is compared with the manufacturing average. For the manufacturing sector in 1966, the wages of production and related workers was 27.2 per cent of the cost of materials and supplies, but for each of the selected industries it was approximately 50 per cent (see Table 4).

As one would expect, productivity in these industries also falls well below the manufacturing average. A very rough understanding of this factor can be obtained by examining "value added by manufacturing activities per man hour of production and related workers". For the manufacturing sector, the latter was 7.0 dollars per hour in 1966. In comparison, for the survey industries it was highest for Foundation

Garment, 4.2 dollars per hour, and reached a low of 2.8 dollars per hour in Children's Clothing (see table 5).

Table 3
Distribution of Establishments by Number of Non-Supervisory Employees for Selected Industries, Ontario,
November 1969

Industry	Total	E		ents by I		
		9 or less	10-19	20-49	. 50-99	100 or more
Shoe Factories						
Number Per Cent	71 100.0	8 11.3	5 7.0	13 18.3	19 26.8	26 36.6
Luggage, Handbag and Small Leather Goods						
Number Per Cent	60 100.0	22 36.7	13 21.7	11 18.3	8 13.3	6 10.0
Hosiery Mills						
Number Per Cent	42 100.0	10 23.8	7 16.7	9 21.4	6 14.3	10 23.8
Children's Clothing and Foundation. Garment ¹						
Number Per Cent	46 100.0	12 26.1	6 13.0	13 28.3	5 10.9	10 21.7
Total						
Number Per Cent	219 100.0	52 23.7	31 14.2	46 21.0	38 17.4	52 23.7

¹ Because of the small number of observations it was necessary to group the Children's Clothing and Foundation Garment Industries.

Source: Special Minimum Wage Survey, February 1969, Research Branch, Ontario Department of Labour.

Table 4

Wages of Production and Related Workers as a Percentage of Cost of Materials and Supplies for Selected Industries, Ontario, 1966

Industry	Per Cent
Manufacturing Shoe Factories	27.2 52.8
Luggage, Handbag and	
Small Leather Goods	51.8
Hosiery Mills	51.2
Children's Clothing	49.3
Foundation Garment	50.3

Source: Manufacturing Industries of Canada, Section D, Province of Ontario, 1966, Cat. No. 31-206, Dominion Bureau of Statistics, Ottawa.

Table 5

Value Added by Manufacturing Activities Per Man Hour of Production and Related Workers for Selected Industries, Ontario, 1966

Industry	Value Added Per Man Hour
	\$
Manufacturing	7.0
Shoe Factories	3.1
Luggage, Handbag and	
Small Leather Goods	3.4
Hosiery Mills	3.5
Children's Clothing	2.8
Foundation Garment	4.2

Source: Manufacturing Industries of Canada, Section D, Province of Ontario, 1966, Cat. No. 31-206, Dominion Bureau of Statistics, Ottawa.

Table 6

Corporation Profits as a Percentage of Value of Shipments of Goods of Own Manufacture for Selected Industries,

Canada, 1964-68

	Indu	istry
Year	Textile	Manufacturing
1964	3.6	6.5
1965	3.3	6.3
1966	. 2.4	5.6
1967	3.1	5.0
1968	· 2.2	5.7

Source: Corporation Profits, Cat. No. 61-003, and Manufacturing Industries of Canada, Cat. No. 31-206, Dominion Bureau of Statistics, Ottawa.

While little material is available that indicates profitability, the limited data in Table 6 suggest that profit margins in the selected industries are very low. The statistic used to shed some light on this factor is "corporation profits as a percentage of value of goods of own manufacture". Several shortcomings of the comparison presented in Table 6 should be noted. First, it has been necessary to compare the Textile Industry (a major group) which includes Hosiery Mills, Children's Clothing and Foundation Garments with the manufacturing sector. Second, the data reflect the situation at the all-Canada level. Keeping these shortcomings in mind, the data do suggest that profit margins in the selected industries are low relative to average profit margins in the manufacturing sector. Over the years 1964 to 1968 corporation profits as a percentage of value of shipments of goods of own manufacture ranged from a high of 6.5 to a low of 5.0 in Manufacturing. The high-low range for the Textile Industry was 3.6 to 2.2 per cent.

The product markets for the goods produced by the selected industries are very competitive. Very few producers control their own distribution channels. Also, the strength of a number of major retail-

Table 7
Value of Exports and Imports of Selected Products, Canada, 1968

Description of Product	Export \$	Import (000)	ort
Hosiery, men's and boys, wool	1	46	940
Hosiery, men's and boys, synthetic fibre	ı	36	361
Hosiery, men's and boys, NES!	I		110
Hosiery, seamless and full fashioned	507	1.25	.251
Hosiery, women's and girls, NES1	ı	, 65	653
Hosiery, children's and infants	J	19	191
Hosiery, NES'	158	1	-1
Girdles and corselettes	9 .	1	1
Foundation garments	ı	1.09	1.098
Brassieres and bandeaux bras	528		1
Women's handbags and purses	2,169	6,750	750
Billfolds, wallets and coin purses	1	92	09/
Boots and shoes, men's and boys, last made	2,101	10,672	672
Boots and shoes, women's and girls, last made	1	16,264	264
Boots and shoes, women's and children's, last made	409		1
Boots and shoes, children's and infants, last made	1	1,55	1,550
Slippers and house footwear	817	3,321	321
Utility footwear, fabric tops		8,52	521
Ski boots	, .	2,675	675
Special purpose footwear, footwear, NES1	2,486	2,241	241
TOTAL	9,181	57,357	357

Not elsewhere specified. Source: D.B.S. Cat. No. 65-004 and 65-007.

ers of the products produced in the selected industries far exceeds the manufacturers. In addition, these producers are in a difficult position because of international competition. In Table 7, the 1968 import and export figures for a number of main products of the industries under review are presented. On almost every item, imports far exceeded the exports of Canadian manufacturers. Overall, for the twenty items examined, imports were approximately six times greater than exports.

In the light of the characteristics described in this section, one would expect employers in the survey industries to be sensitive to any imposed increase in labour costs, and to make adjustments to offset labour cost increases that are attributable to a legal minimum wage. Of course, the basic problem is to identify the adjustments utilized by employers. In the short run, any major substitution of capital equipment for higher priced labour cannot be undertaken because of the planning period involved. Such changes as a re-organization of plant layout to improve the flow of work, a substitution of more skilled for less skilled workers or laying off the least productive workers could be undertaken. Other short-run adjustments might involve absorbing an increase in labour costs by reducing profit margins or increasing product prices. Hopefully, the information generated through the special surveys will permit some light to be shed on the actual adjustment channels utilized by employers.

SURVEY DESIGN

The establishment survey used to produce the data presented in this report was designed to collect both quantitative and qualitative information. Payroll information for each non-supervisory employee was collected for the payroll periods ending November 30, 1968 and January 18, 1969. These data included standard and actual hours of work, bonus or commission, gross earnings and initial overtime rate. As well, employees were identified by sex and as office or non-office workers.

Information was also collected on the characteristics of employees who left an establishment between November 30, 1968 and January 18, 1969, and on the characteristics of employees hired during the same time period. In addition, wage rate data for selected occupations

was collected for the two payroll periods8.

Along with the quantitative data, a number of questions were asked concerning whether short-run adjustments had been implemented to offset an increase in labour costs. These covered such matters as system of payment (time rate, piece rate), work periods, personnel policies, organization of the flow of work, product lines and product prices.

Lists of establishments for the industries surveyed were obtained from the Dominion Bureau of Statistics. A total of 219 establishments were identified which represents all Ontario establishments in the five selected industries. A field enumeration staff was used to collect the quantitative data directly from records maintained by the establishments and to obtain the non-quantitative information by interviewing responsible persons in each establishment.

Turning to the two reference payroll periods for a moment, the decision to select payroll periods ending November 30, 1968 and January 18, 1969 is undoubtedly open to criticism because of the definite seasonal decline in output and employment during this period. Unfortunately, the thirty cent increase in Ontario's legal minimum rate became effective January 1, 1969. As a result, the selection of reference dates became a difficult question. It was decided to choose a payroll period in November to avoid the abnormal patterns that occur during December. The second reference date, payroll period ending January 18, 1969, was chosen in an attempt to identify the immediate impact of the revision. The longer run effects will be identified through an analysis of data collected for January 1970. Also, the comparison of data for January 1969 and January 1970 should circumvent the seasonality problem.

Because of problems encountered in collecting the occupational rate data the information produced was too unreliable to support analysis and, consequently, no occupational rate data is presented in this report. For a discussion of the problems encountered, see page 26.

DIRECT IMPACT OF THE 1969 MINIMUM WAGE REVISION

Before examining the immediate impact of the thirty cent revision on wage structures and related characteristics, a brief examination of the seasonal employment pattern between November and January in the selected industries is presented. This seasonal aspect is important because observed changes in such items as distributions of employees by wage class and industry average hourly rates may be partly attributable to seasonal fluctuations in employment that are independent of a minimum wage revision. This is especially the case if low-wage production workers are those most affected by seasonal swings in employment.

Monthly employment indexes are available only at the Canada level for four of the five selected industries. However, these data do reveal a marked seasonal employment pattern. The general tendency is for employment to fall in December with an upswing in January (see Table 8).

The special survey data also reflect this seasonal pattern. Overall, the number of non-supervisory employees in the five industries declined 2.9 per cent from 16,203 to 15,738 between November and January (see Table 9). Within these industries, the largest relative decline, 8.9 per cent, occurred in Children's Clothing. Also, when males and females are contrasted it becomes evident that female workers in the survey industries are more heavily affected by seasonal employment changes.

Impact on Distributions of Employees by Hourly Wage Rate

. In this report, "direct impact" is defined as the immediate compression of a wage distribution attributable to an upward revision in a legal minimum wage. The data support the existence of an immediate compression effect, and, as well, permit an analysis of variation in direct impact by size of establishment, type of worker and size of community.

The immediate effect of the thirty cent revision is reflected by an upward shift in the lower end of the distributions of non-supervisory employees by wage class between November 1968 and January 1969.

Employment Indexes for Selected Months for Selected Industries, Canada 1966-69 Table 8

	March	95.6 92.2 97.6	122.3 130.9 127.4	95.1 104.2 110.4	98.1 97.9 95.7
	February	94.7 95.1 98.0	122.9 129.9 127.8	95.9 103.3 112.1	100.1 98.4 96.3
TH.	January	97.6 94.6 96.8	120.2 125.8 126.8	95.9 100.3 111.7	99.8 94.7 95.7
MONTH	December	94.6 89.5 94.4	116.9 120.9 120.9	95.7 99.5 112.4	95.7 90.3 92.4
	November (1961 = 100)	97.7 93.7 95.5	126.7 128.6 129.6	100.1 101.6 116.1	95.7 91.9 94.6
	October	97.7 93.1	129.8 127.6 128.4	. 99.4 100.0 115.6	96.0 94.6 98.2
	Year	1966-67 1967-68 1968-69	1966-67 1967-68 1968-69	1966-67 1967-68 1968-69	1966-67 1967-68 1968-69
	Industry	Shoe Factories	Luggage, Handbag and Small Leather Goods	Hosiery Mills	Children's Clothing

Source: Employment and Average Weekly Wages and Salaries, Cat. No. 72-002, Dominion Bureau of Statistics, Ottawa.

In Children's Clothing, the most heavily affected of the five industries, 32.2 per cent earned less than \$1.30 per hour in November 1968, but by mid-January 1969 this proportion had been reduced to 12.1 per cent (see Table 10). Also, in each of the selected industries, the proportion of females affected by the minimum wage change is much higher compared with males. This difference in incidence, however, is to be expected given the high proportion that females comprise of the production work force in these industries.

Table 9
Non-Supervisory Employees by Sex for Selected Industries,
Ontario, November 1968 and January 1969

	No	vember	1968	Ja	nuary 1	969	Per	cent Ch	ange
Industry	Male	Female	Total	Male	Female	Total	Male	Female	Total
Shoe Factories	2,713	5,028	7,741	2,693	4,974	7,667	-0.7	-1.1	-1.0
Luggage, Handbag and Small Leather									
Goods	852	1,679	2,531	824	1,619	2,443	-3.3	-3.6	-3.5
Hosiery Mills	626	2,258	2,884	629	2,160	2,789	0.5	-4.3	-3.3
Children's Clothing	140	1,224	1,364	136	1,107	1,243	-2.9	-9.6	-8.9
Foundation Garment	192	1,491	1,683	185	1,412	1597	-4.2	-5.3	-5.2

Significant proportions of workers in these industries under \$1.30 per hour as of mid-January 1969 may reflect non compliance; but there are several other possible explanations. Given the short time period between the effective date of the new minimum and the January survey date, approximately two weeks, the data may represent an adjustment lag. Another possibility is that the workers below \$1.30 may be new employees hired at the minimum learner rate of

Table 10

Percentage Distribution of Non-Supervisory Employees by Sex and Wage Class for Selected Industries, Ontario, November 1968 and January 1969

	6	Total		1.0	0.7	4.9	25.4	10.2	9.6	7.0	6.9	6.2	4.3	23.9		2,789
	January 1969	Male Female Total		1.0	0.7			12.2		7.6	6.7	6.2	3.5	14.6		2,160
Mills	Jan	Make		9.0	9.0	4.3	2.7	3.3	7.3	4.9	7.5	6.2	7.2	55.3		629
Hosiery Mills	896	Total		3.8	9.4	12.4	11.2	0.6	8.1	6.2	7.2	5.6	4.1	22.9		2,884
	November 1968	Male Female Total		4.6	11.6	14.9	13.6	10.2	8.5	6.5	6.7	5.8	3.6	14.0		2,258
	Nov	Male		8.0	1.6	3.5	2.6	4.6	6.7	5.1	9.1	5.1	5.6	55.1		979
ther	696	Total		0.1	. 0.2	2.9	23.5	11.7	9.1	6.9	4.9	5.7	3.8	31.0		2,443
nall Lea	January 1969	Male Female Total		0.1	0.3	3.8	33.4	16.9	12.0	9.3	4.6	5.7	3.0	10.1		1,619
and Sm	Jan	Male		,	1	1.2	3.9	1.5	2.7	2.2	5.6	5.8	5.5	71.7		824
Luggage, Handbags and Small Leather Goods	8961	Total		2.2	6.2	9.5	11.5	12.6	8.7	7.1	5.3	6.2	3.8	27.4		2,531
age, Ha	November 1968	Male Female Total		2.9	0.6	13.0	6.7	18.1	10.5	8.8	4.8	6.5	2.0	9.8		1,679
Lugg	Š	Male		0.1	9.0	2.6	1.3	∞. -	3.3	3.6	6.3	7.4	7.5	64.7		852
	696	Total		9.0	8.0	5.0	15.4	8.2	10.1	7.6	7.2	5.8	4.9	34.5		7,667
[P]	January 1969	Male Female Total		9.0	1.2	7.2	21.7	11.1	12.9	9.3	7.9	0.9	4.7	17.4		4,974
Shoe Factories	Ja	Male		0.4	0.1	8.0	3.9	2.9	4.9	4.5	5.8	5.5	5.1	1.99		2,693
Shoe I	1968	Female Total		3.0	5.4	9.4	9.8	%. 4.∞	8.1	0.7	6.3	5.8	4.3	33.9		7,741
	November 1968			4.3	7.5	13.2	11.9	10.8	6.6	9.7	7.1	6.2	4.1	17.5		5,028
	No	Male		0.5	1.4	2.3	2.6	3.9	4.7	5.7	. 4.8	5.0	4.8	64.3		2,713
	Wage Class		69	Under 1.10	1.10 - 1.19	1.20 - 1.29	1.30 - 1.39	1.40 - 1.49	1.50 - 1.59	1.60 - 1.69	1.70 - 1.79	1.80 - 1.89	1.90 - 1.99	2.00 or more	Total	Employees

Table 10 cont'd

Percentage Distribution of Non-Supervisory Employees by Sex and Wage Class for Selected Industries, Ontario, November 1968 and January 1969

		Ö	Children's Clothing	Clothi	ng			For	Foundation Garment	Garm	ent	
Wage Class	No	November 1968	8961	Ja	January 1969	696	No	November 1968	896	Jar	January 1969	690
	Male	Female Total	Total	Male	Male Female Total	Total	Male	Female Total	Total	Male	Female	Total
€>												
Under 1.10	2.1	11.3	10.4	1	1.3	1.1	1	4.5	4.0	1	0.3	0.3
1.10 - 1.19	2.1	10.7	8.6	1.5	1.2	1.2	1	9.1	8.0	1	9.0	0.5
1.20 - 1.29	5.7	12.7	12.0	2.2	10.7	8.6	1.6	17.6	15.7	0.5	5.5	4.9
1.30 - 1.39	2.1	11.1	10.2	3.7	30.1	27.2	1.0	10.1	0.6	2.2	30.3	26.8
1.40 - 1.49	4.3	8.7	8.2	4.4	8.7	8.2	4.2	6.6	9.2	2.7	6.9	6.1
1.50 - 1.59	6.4	7.5	7.4	5.1	00	8.4	5.7	8.9	9.8	0.9	9.4	0.6
1.60 - 1.69	7.1	6.4	6.5	9.9	7.0	7.0	3.6	9.2	9.8	3,3	00	8.1
1.70 - 1.79	4.3	4.3	4.3	4.4	6.5	6.3	6.3	5.7	5.8	5.4	8.9	8.5
1.80 - 1.89	4.3	4.7	4.6	1.5	5.3	4.9	3.1	5.6	5.3	3.8	7.4	7.0
1.90 - 1.99	2.9	3.4	3.4	2.2	4.1	3.9	9.4	4.2	4.8	0.9	8.4	4.9
2.00 or more	58.8	18.6	22.7	68.5	17.1	22.1	65.3	16.0	21.6	0.07	17.9	24.0
Total												
Employees	9	1,229	1,369	136	1,107	1,243	192	1,491	1,683	184	1,412	1,596

\$1.20 per hour. Between the end of November 1968 and mid-January 1969, there were 852 new hires in the five industries.

In addition to the immediate compression effect, there is a possibility that rate increases may occur for employees who were already at or above the new minimum wage. Such increases could occur if there is a need to maintain rate differentials between jobs in an establishment. If rate differentials reflect a logical system a narrowing of them attributable to the minimum wage could adversely affect the morale and productivity of workers higher up in the wage structure. Consequently, these workers may have to receive rate increases to reestablish original differentials. There is very limited evidence of some above minimum rate adjustments occurring for female employees, as reflected by the slightly higher proportions of females earning above \$1.39 in January compared with November¹⁰. In light of the short time period between the effective date of the \$1.30 minimum and the second reference period, however, it would be surprising to observe a large number of above minimum increases.

Differences between the proportions of office and non-office workers earning less than \$1.30 per hour as of November 1968 indicate that it is primarily production and related workers who were directly affected by the new minimum wage in the selected industries. For example, in Luggage, Handbag and Small Leather Goods, less than one per cent of the non-supervisory office workers fell below \$1.30 in November, but 19.8 per cent of the non-supervisory plant workers were in this position (see Table 11).

For the first reference period, November 1968, variation in the proportion of employees earning less than \$1.30 per hour by size of establishment is shown in Table 12. Overall, the proportion declines as size of establishment increases, but this pattern is more evident in some industries than others. For example, in Luggage, Handbags and Small Leather Goods, the proportion under \$1.30 per hour in No-

⁹ Through a regulation made under Ontario's Employment Standards Act, an employer may, during the first four-month period of employment, be permitted to pay a minimum hourly rate of \$1.20 to an employee who is employed as a learner.

Rather than reflecting above minimum rate adjustments, the slightly higher proportion of females earning above \$1.39 in the second reference payroll period may be attributable to the seasonal decline in employment.

Table 11

Percentage Distribution of Non-Supervisory Employees by Office and Non-Office and Wage Class for Selected Industries, Ontario, November 1968 and January 1969

	January 1969	Non- Office		6.0	0.7	5.1	26.6	10.3	9.8	6.8	7.0	5.8	4.4	22.5		2,636	
Mills	Januar	ОШсе		ı	1	0.7	0.9	9.8	7.3	10.6	4.6	13.2	3.3	45.5		151	
Hosiery Mills	November 1968	Non- Office		4.0	6.6	13.1	. 11.5	0.6	8.3	0.9	7.3	5.2	4.1	21.7		2,730	
	Novemb	Отве		1	1.3	ı	5.9	8.6	5.2	9.8	7.2	13.1	3.9	43.7		153	
Luggage, Handbags and Small Leather Goods	y 1969	Non- Office		0.1	0.2	3.2	26.3	12.7	9.3	6.9	4.7	5.6	3.7	27.5		2,209	
and Small	January 1969	Office		ı	ł	6.0	6.0	2.1	5.1	8.9	8.9	7.3	5.1	65.0		234	
Handbags	er 1968	Non- Office		2.5	8.9	10.5	12.5	13.5	8.2	7.2	5.1	6.1	4.0	23.7		2,292	
Luggage,	November 1968	Office		1	0.4	0.4	1.7	4.2	7.1	5.4	7.1	7.5	2.5	63.7		239	
	y 1969	Non- Office		9.0	6.0	5.4	16.3	8.7	10.2	7.6	7.2	5.6	5.0	32.6		096'9	
ctories	January 1969	Отсе		0.2	I	1:1	6.4	. 3.4	9.1	7.4	7.4	7.0	3.4	53.9		902	
Shoe Factories	ır 1968	Non- Office		3.2	5.0	10.0	00	00	8.2	6.9	6.1	5.7	4.5	32.2		7,054	
	November	Office		0.4	9.0	3.4	7.3	4.0	6.9	0.1	4.0	6.3	2.8	51.9		682	
	Wood Close	wage Class	€9	Under 1.10	1.10 - 1.19	1.20 - 1.29	1.30 - 1.39	1.40 - 1.49	1.50 - 1.59	1.60 - 1.69	1.70 - 1.79	1.80 - 1.89	1.90 - 1.99	2.00 or more	Total	Employees	

Table 11 cont'd

Percentage Distribution of Non-Supervisory Employees by Office and Non-Office and Wage Class for Selected Industries, Ontario, November 1968 and January 1969

		Children's	Clothing			Foundation Garment	Garment	
Wage Class	November 1968	er 1968	January	6961	Novemb	November 1968	January	1969
D	Office	Non-	Office	Non-	Office	Non-	Office	Non-
		Office		Office		Office		Office
69								
Under 1.10	7.1	9.5	i	1.0	0.8	4.3	0.8	0.2
1.10 - 1.19	6.2	10.3	2.8	Ξ	i	8.3	ļ	0.5
1.20 - 1.29	3.6	12.9	2.8	10.5	1	17.4	1	5.4
1.30 - 1.39	1	12.1	6.4	29.2	8.0	6.7	8.0	29.0
1.40 - 1.49	3.6	8.7	2.8	8.7	1	10.0	1	6.7
1.50 - 1.59	6.0	8.1	6.0	9.1	1.6	9.1	1.6	6.7
1.60 - 1.69	2.7	6.7	3.7	7.3	1.6	9.1	1	∞ ∞.
1.70 - 1.79	5.4	4.3	4.6	6.4	3.9	5.9	4.8	8.7
1	8.6	4.2	9.2	4.5	8.7	5.0	ος ος	. 8.9
	2.7	3.5	3.7	3.9	4.7	4.2	4.8	5.0
2.00 or more	58.0	6.61	63.3	18.1	6.77	16.9	78.4	19.2
Total					!		i.	,
Employees	112	1,236	109	1,132	127	1,556	172	1,4/1

vember 1968 consistently declines as one moves from the smallest to the largest employers, while in Shoe Factories there is a definite decline only when the size group fifty to ninety-nine employees is reached.

The proportion under \$1.30 per hour in November 1968 by size of community is presented in Table 13. One of the most notable features of this Table is the lack of a definite tendency for the proportion under \$1.30 to fall as size of community increases. In fact, for three of the five industries - Shoe Factories, Hosiery Mills and Foundation Garments - the proportion earning less than \$1.30 per hour is highest in the largest communities. For these three industries, the data suggest that the wage scale tends to be lower in the larger population centres. It is interesting to speculate that one factor underlying this phenomenon may be the greater availability of female workers in larger centres who desire to supplement family income through intermittent labour force participation.

Table 12

Proportion of Non-Supervisory Employees Under \$1.30 Per
Hour by Size of Establishment for Selected Industries,
Ontario, November 1968

		Size of Est	ablishment	
Industry	Less than 20 employees	20 - 49 employees	50 - 99 employees	100 or more employees
Shoe Factories	34.9	34.3	23.4	15.2
Luggage, Handbag and Small Leather				
Goods	28.3	25.8	24.3	10.6
Hosiery Mills	58.8	41.3	19.1	22.4
Children's Clothing	42.1	35.8	39.4	26.6
Foundation Garment	51.6	Alpenin	3.6	32.6

Table 13

Proportion of Non-Supervisory Employees Under \$1.30 Per
Hour by Size of Community for Selected Industries, Ontario,
November 1968

		Size	of Commu	nity	
Industry ·	Under 20,000	20,000 less than 50,000	50,000 less than 100,000	100,000 less than 500,000	500,000 or more
Shoe Factories	19.6	9.1	3.9	22.0	22.8
Luggage, Handbags and Small Leather					
Goods	4.0	18.6	24.0	6.7	18.5
Hosiery Mills	19.8	13.2	21.2	31.9	39.8
Children's Clothing	41.1	_	_	39.8	29.2
Foundation Garment	4.1		_	59.7	31.5

Causes of Hourly Rate Increases

Although the time period between the first two reference periods is very short, approximately 6 weeks, the changes in the distributions by wage class observed earlier are not entirely attributable to the thirty cent increase in the minimum wage. The hourly rates of a number of employees changed between the two survey dates because of merit or annual increases, adjustments specified in collective agreements or variation in gross piece rate earnings unrelated to the new minimum wage.

Whenever possible, during the field survey work, an attempt was made to identify the cause of observed rate increases. At times, sweeping generalizations were given by respondents: "All wage increases were due to the higher minimum wage". In many cases, however, it was possible to relate rate increases to specific causes. The

Table 14

Distribution of Employees by Cause of Hourly Rate Increase between November 1968 and January 1969 for Selected Industries, Ontario

						0	auses of R	Causes of Rate Increase			
Industry	Total Employees	Employees with Rate Increase	with	Minimum Wage	n Wage	Merit or An	Merit or Annual Increase	Coll	Collective Agreement	Ot	Other ¹
		Z _o .	%	No.	%	, oZ	%	No.	%	Š.	8
Shoe Factories 7	7,741	3,569	0.001	1,038	29.1	429	12.0	280	7.8	1,822	51.0
Luggage, Handbag											
	2,531	1,079	0.001	360	33.4	209	19.3	33	3.0	477	44.2
Hosiery Mills	2,892	1.308	100.0	582	44.4	94	7.1	1	dent	634	48.4
Children's Clothing	1,356	577	0.001	283	49.0	81	14.0	1	1.	213	36.9
Foundation Garment	1,683	922	0.001	372	40.3	243	26.3	16	1.7	291	31.6
Total 16	16,203	7,455	100.0	2,635	35.3	1,056	14.2	329	4.4	3,437	46.1

Approximately three-quarters of the rate increases in this "other" category are attributable to variation in gross earnings of piece rate workers based on increases in physical output with no change in the piece rates.

results of this work are summarized in Table 14.

Overall, hourly rates increased for 7,455 of the 16,203 non-supervisory employees in the five industries. When those with a rate increase are distributed by cause of increase the minimum wage revision accounts for 35.3 per cent. Merit or annual increases and increases based on collective agreements were reported as the cause in 14.2 and 4.4 per cent of the cases respectively. The largest number of rate increases, 46.1 per cent, were attributed to other causes. Within this "other" category, approximately three-quarters of the hourly rate increases occurred for piece rate workers. It should be stressed, however, that these increases for piece rate workers reflect fluctuations in their output rather than a revision in piece rates attributable to the higher minimum wage.

A better insight into the extent to which the previously observed compression in the wage structure is attributable to the minimum wage change can be obtained from Table 15. In this Table, employees with an observed increase in their hourly rate are distributed by wage class as of November 1968 and cause of rate increase. These data indicate that the primary effect of the minimum wage was to compress the wage structure by causing rate increases for employees at the low end of the distribution, while the rate increases attributable to other causes tended to offset this compression effect. Also, as one moves up the scale away from the class containing the new legal rate, \$1.30 to \$1.39, the incidence of the above minimum rate increases diminishes.

Further, of the 1,056 hourly rate increases that were attributed by respondents to merit or annual adjustments 14.7 and 13.4 per cent of the workers affected were previously earning between \$1.30 to \$1.39 and \$1.40 to \$1.49. While the evidence is difficult to interpret the latter creates a suspicion that some employers may have rationalized above-minimum rate increases in terms of merit or annual increases.

The employees who received a wage increase because of the new legal minimum rate are distributed according to system of payment, and by size of establishment in Tables 16 and 17 respectively. On the first characteristic, pay system, it is evident that time rated workers, as opposed to those who are paid on a piece rate basis, are primarily affected by a minimum wage in the five selected industries. Of the

Table 15

Percentage Distribution of Employees with an Observed Hourly Rate Increase by Cause of Increase and Wage Class as of November 1968 for Five Selected Industries, Ontario

	Ca	ause of Ho	urly Rate Incr	'ease
Wage Class	Minimum Wage	Merit or Annual Increase	Collective Agreement	Other¹
\$				
Under 1.10	14.0	0.7	0.6	0.3
1.10 - 1.19	30.2	0.7	1.5	0.8
1.20 - 1.29	43.8	1.9	5.2	2.8
1.30 - 1.39	4.2	14.7	16.1	9.6
1.40 — 1.49	1.9	13.4	16.1	10.5
1.50 - 1.59	1.4	11.8	8.5	9.9
1.60 - 1.69	1.0	11.1	9.1	8.6
1.70 - 1.79	0.7	6.3	7.3	8.1
1.80 - 1.89	0.7	6.1	4.3	8.0
1.90 - 1.99	0.3	3.6	7.0	6.5
2.00 or more	1.7	29.6	24.2	34.8
Total Employees	2,635	1,056	329	3,435

Approximately three-quarters of the rate increases in this "other" category are attributable to variation in gross earnings of piece rate workers based on increases in physical output with no change in piece rates.

Table 16

Distribution of Employees with an Hourly Rate Increase between November 1968 and January 1969 Attributable to the Minimum Wage Revision by Pay System for Selected Industries, Ontario

	т	otal	Pay S	System
Industry	_	oloyees	Time Rate	Piece Rate ²
	No.	%	<u>%</u>	<u>%</u>
Shoe Factories	1,038	100.0	82.2	17.8
Luggage, Handbags and Small Leather Goods	360	100.0	97.8	2.2
Hosiery Mills	580	100.0	80.5	19.5
Children's Clothing	283	100.0	65.0	35.0
Foundation Garment	372	100.0	95.2	4.8
Total	2,633	100.0	83.9	16.1

¹ Includes employees paid primarily on a time rate system but who may also earn a bonus.

2,633 employees involved, 83.9 per cent were on a time rate (see Table 16). Within the five industries this proportion was highest in Luggage, Handbags and Small Leather Goods where time rated workers accounted for 97.8 per cent of the total employees directly affected by the minimum wage.

When the proportion of employees with an hourly rate increase caused by the thirty cent revision in the floor rate is examined by size of establishment, the greater impact on small establishments becomes more evident. In establishments with less than twenty and twenty to twenty five employees, approximately one-quarter of the non-supervisory employees received a wage increase because of the thirty cent

² Includes employees paid primarily on a piece rate system but who may also earn a bonus.

Table 17

Proportion of Employees with an Hourly Rate Increase between November 1968 and January 1969 Attributable to the Minimum Wage Revision by Size of Establishment for Five Selected Industries, Ontario

Size of Establishment	Proportion Affected
Less than 20 employees	24.0
20 - 49 employees	25.8
50 - 99 employees	20.4
100 or more employees	13.4

revision; but this proportion declines to 20.4 and 13.4 per cent respectively as one moves to establishments with fifty to ninety-nine and 100 or more employees (see Table 17).

In summary, the information presented in this part of the report indicates that significant proportions of non-supervisory employees in the five selected industries received a wage increase because of the thirty cent revision in Ontario's legal minimum wage. Of course, most of these rate increases were granted by employers to comply with the new floor rate; but there is also evidence that above minimum rate increases directly related to the new \$1.30 floor rate occurred. In addition, the data revealed that in the industries analyzed the workers most substantially affected by the minimum wage increase are non-office time rate female employees. Also, in terms of size of establishment, small employers (less than fifty employees) are more heavily affected than their larger counterparts.

IMPACT ON AVERAGE HOURLY EARNINGS AND WAGE DIFFERENTIALS

The effects of the thirty cent minimum wage revision on the distributions of employees by wage class documented in the previous section should give rise to both an above normal advance in average hourly earnings for the industries under review and to changes in wage differentials. Both these aspects are examined in this part of the report.

Between November 1968 and January 1969, average hourly earnings in Ontario's manufacturing sector increased 1.8 per cent from \$2.79 to \$2.84 per hour!. In contrast, the smallest increase in the five selected industries occurred in Shoe Factories where the average hourly rate rose 4.8 per cent (see Table 18). The largest increase, 9.1 per cent, occurred in Foundation Garments.

Underlying these average industry changes were much larger increases for female workers, which is to be expected given the higher impact of the minimum wage adjustment on these workers. For example, in Luggage, Handbags and Small Leather Goods, female average hourly earnings increased 10.1 per cent between November and January.

In turn, these changes have affected wage differentials. Both the absolute and percentage differential between the average hourly rates in the selected industries and the average rate in the manufacturing sector have been reduced. The largest reduction took place for Foundation Garments where the absolute difference between the industry average and the manufacturing average declined by eleven cents per hour and the percentage difference fell from 41.2 to 36.6 (see Table 19). While many observations would be required before firm generalizations could be put forward, this limited analysis does suggest that the thirty cent revision in the minimum wage compressed the interindustry wage structure. Consequently, to the extent that traditional inter-industry wage differentials are taken into account for determining private wage agreements, an additional incentive for above-minimum wage changes may be created.

¹¹ Man-Hours and Hourly Earnings, Cat. No. 72-003, Dominion Bureau of Statistics, Ottawa.

Table 18

Average Hourly Earnings by Sex for the Manufacturing Sector and Selected Industries, Ontario, November 1968 and January 1969

		A	Average Hourly Earnings	ly Earnings			Perc	Percentage Increase	ease
Industry	Z	November 1968	00		January 1969				
	Both			Both			Both		
	Sexes	Male	Female	Sexes	Male	Female	Sexes	Male	Female
Manufacturing1	2.79	1	1	2.84	F	ı	1.8	1	1
Shoe Factories	1.89	2.31	1.64	1.98	2.43	1.73	5.4	5.2	5.5
Luggage, Handbag and Small									
Leather Goods	1.73	2.17	1.49	1.87	2.31	1.64	8.1	6.5	10.1
Hosiery Mills	1.72	2.23	1.57	1.81	2.26	1.66	5.2	1.3	5.7
Children's Clothing	1.67	2.25	1.60	1.77	2.34	1.70	0.9	4.0	6.3
Foundation Garment	1.64	2.22	1.57	1.80	2.35	1.72	9.1	5.9	9.6

¹ Man-Hours and Hourly Earnings, Cat. No. 72-003, Dominion Bureau of Statistics, Ottawa.

Also, the male-female wage differential in the five selected industries was affected by the thirty cent revision. This result is not surprising in light of the larger proportions of females earning less than \$1.30 per hour in November 1968 compared with males. Except for Shoe Factories, the statistics in Table 20 reveal a reduction occurred in both the absolute and percentage male-female wage differential in the survey industries between November and January. The largest decline took place in Hosiery Mills where the absolute difference was reduced six cents per hour and the percentage differential dropped from 29.6 to 26.5.

Further, given the greater proportions of non-office employees affected by the change in the minimum wage, one would expect the office-non-office wage differential to fall. As can be observed in Table 21, this differential declined. For each industry, except Children's Clothing, the absolute differential decreased, and for all five industries, the office-non-office percentage wage differential declined.

Before leaving this discussion of differentials, an important omission should be noted. As indicated earlier, it may be necessary for employers affected by a revision in a legal minimum wage to provide rate increases for workers who were already at or above the new minimum to maintain original wage differentials between occupations. To probe this aspect, the special establishment survey was designed to collect occupational rate data. Because of difficulties experienced during the collection of this information, however, the occupational rate data was judged too unreliable to permit any meaningful analysis. Undoubtedly, many readers are well aware of the problems in this area; but, in the hope that some may benefit from a recounting of the problems experienced in the survey, these are briefly summarized below.

Significant variation in products manufactured between establishments that are classified to the same industry at the three-digit level created a major difficulty. A good example of this problem is the situation in the Luggage, Handbags and Small Leather Goods Industry. Classified to this industry are establishments engaged in the following activities: sewing leather notebooks, assembling plastic luggage from prefabricated castings and metal frames, cutting industrial belts and manufacturing musical instrument cases in small lots. Given

Table 19

Absolute and Percentage Average Hourly Wage Differentials between the Manufacturing Sector and Selected Industries, Ontario, November 1968 and January 1969

	Ĺ	November 1968			January 1969	
Industry	Average Hourly Wage	Absolute Difference	Percentage Difference	Average Hourly Wage	Absolute Difference	Percentage Difference
Manufacturing1	2.79	I	ı	2.84	ı	ı
Shoe Factories	1.89	06:	32.3	1.98	98.	30.3
Luggage, Handbag and Small						
Leather Goods	1.73	1.06	38.0	1.87	76.	34.2
Hosiery Mills	1.72	1.07	38.4	1.81	1.03	36.3
Children's Clothing	1.67	1.12	40.1	1.77	1.07	37.7
Foundation Garment	1.64	1.15	41.2	1.80	1.04	36.6

Man-Hours and Hourly Earnings, Cat. No. 72-603, Dominion Bureau of Statistics, Ottawa.

Table 20

Absolute and Percentage Average Hourly Wage Differentials between Males and Females for Selected Industries, Ontario, November 1968 and January 1969

		Novem	November 1968			Januar	January 1969	
Industry	Average Hourly Wage	age Wage	Absolute Difference	Percentage Difference	Average Hourly Wage	age Wage	Absolute Difference	Percentage Difference
	Male	Female			Male	Female		
Shoe Factories	2.31	1.64	.64	29.0	2.43	1.73	.70	28.8
Luggage, Handbag and Small Leather Goods	2.17	1.49	89:	31.3	2.31	1.64	19.	29.0
Hosiery Mills	2.23	1.57	99.	29.6	2.26	1.66	09.	26.5
Children's Clothing	2.25	1.60	.65	28.9	2.34	1.70	.64	27.3
Foundation Garment	2.22	1.57	.65	29.3	2.35	1.72	.63	26.8

Office-Non-Office Average Hourly Wage Differentials for Selected Industries, Ontario, November 1968 and January 1969 Table 21

January 1969	Absolute Percentage Difference Difference	Non- Office	1.95 .33 14.5			20.3	7.5	
	Average Hourly Wage	Office N	2.28		2.53			
	Percentage Difference		17.0		32.0	12.3	25.2	33.7
November 1968	Absolute Difference		.38		.78	.24	.55	.81
Novem	ige Wage	Non- Office	1.85		99.1	1.71	1.63	1.59
	Average Hourly Wage	Отпсе	2.23		2.44	1.95	2.18	2.40
	Industry		Shoe Factories	Luggage, Handbag and	Small Leather Goods	Hosiery Mills	Children's Clothing	Foundation Garments

this diversity, it is very difficult to define occupations for production workers that are common to establishments throughout the industry.

Also, for the industries surveyed, in many cases payroll records did not contain information on an employee's occupation, and in many establishments personnel records containing such information did not exist. When adequate records were not available, the only way employees could be matched with selected occupations was through interviewing either the office manager, payroll clerk or plant foreman. Unfortunately, this procedure leaves a great deal of room for arbitrary decisions to be made in the field by the enumerator.

In small establishments, which are very important in the industries surveyed, the collection of occupation rate data becomes even more difficult. It is common for an employee to perform more than one job and it must be left to the discretion of the respondent to determine the employee's "principal job".

Given these difficulties, a large number of arbitrary decisions were made during the collection of the occupational rate data by the field enumerators and the respondents. As a result, the data collected was too questionnable to provide the basis for analysis.

SHORT-RUN ADJUSTMENTS TO INCREASED LABOUR COSTS

Respondents were asked a number of questions to determine whether or not adjustments had been made to offset their increased labour costs. As expected, given the short time period between the introduction of the new minimum wage (January 1, 1969) and the second reference period (January 18, 1969) few such adjustments were reported. In general, both the three-week period since the introduction of the \$1.30 minimum and even the longer period during which the effective date of the new minimum was known¹² were too short for respondents to contemplate, design and implement many changes. This was anticipated in the overall design of the study and

¹² The effective date of the thirty cent increase in the minimum wage from \$1.00 to \$1.30 per hour was announced publicly by the Ontario Department of Labour on October 17, 1968.

data from the January 1970 follow-up survey should permit an adequate analysis of the adjustment question.

However, it was decided to ask a set of questions on adjustments during the first survey because there are a number of ways employers could potentially adjust in the short run to an increase in the price of labour. Some of the more obvious would be to lay off the least productive workers and eliminate jobs or substitute higher skilled workers for unskilled employees. In this section, the extent to which these and other adjustment possibilities were actually utilized is examined.

With respect to the employment aspect, data were collected on employees laid off between the end of November 1968 and mid-January 1969 and employers were asked in each individual case the cause of lay-off³. As can be seen from Table 22, the seasonal employment factor was given as the primary reason for lay-offs. Overall, of the 353 workers laid off by employers in the five selected industries, 161 were released because of lack of work and 102 workers were dismissed because their work performance was unsatisfactory. According to employers, very few workers in the five industries were dismissed because their work performance did not merit a wage of \$1.30 per hour. A total of twenty-five workers were laid off for this reason and of these twenty-four were females. Also, regardless of reason for lay-off, these data indicate again that in the industries surveyed female employment is most open to seasonal declines. Females accounted for 84 per cent of the 353 workers laid off.

Employees who were laid off are distributed by wage class in Table 23. Among females well over one-half were earning less than \$1.30 per hour prior to being laid off. In contrast, very few males were in this position. In Table 24, these workers are distributed by sex and length of employment prior to being laid off. These data reveal that employees with little seniority were most heavily affected by seasonal lay-offs. Overall, 180 of the 353 laid off had been employed less than six months.

¹³ This analysis of lay-offs excludes workers who voluntarily left the establishment or retired.

Table 22

Distribution of Employees Laid Off between November 1968 and January 1969 by Sex and Reason for Lay-Off for Five Selected Industries, Ontario

Reason for Lay-Off	V	Vorkers Laid	Off
	Total	Male	Female
Lack of work	161	31	130
Unsatisfactory performance	102	25	77
Minimum wage	25	1	24
Not specified	65	1	64
Total	353	58	295

Table 23

Distribution of Employees Laid Off between November 1968 and January 1969 by Sex and Wage Class for Five Selected Industries, Ontario

Wage Class	V	Vorkers Laid	d Off
	Total	Male	Female
Less than \$1.30	192	7	185
\$1.30 - \$1.49	74	10	64
\$1.50 and over	75	30	45
Not specified	12	11	1
Total	353	58	295

Information on the marital status of these workers is presented in Table 25. Males are evenly distributed by marital status categories, but the great majority of females who were laid off, 219 out of 295, were married.

Table 24

Distribution of Employees Laid Off between November 1968 and January 1969 by Sex and Length of Employment Prior to Lay-Off for Five Selected Industries, Ontario

Length of Employment	V	Vorkers Laid	Off
	Total	Male	Female
Less than 6 months	180	33	147
6 months to 12 months	63	8	55
More than 12 months	110	17	93
Total	353	58	295

Table 25

Distribution of Employees Laid Off between November 1968 and January 1969 by Sex and Marital Status for Five Selected Industries, Ontario

Marital Status		Workers Lai	id Off
	Total	Male	Female
Single	100	28	72
Married	247	28	219
Other	6	2	4
Total	353	58	295

During the interview phase of the survey, employers were asked whether any changes in hiring standards had been made to upgrade the quality of the work force. In general, there were very few responses that could be interpreted as an improvement in hiring standards attributable to the new minimum wage. One establishment in

Luggage, Handbags and Small Leather Goods responded that because of the minimum wage experienced workers were being hired to replace inexperienced workers in order to improve the quality and quantity of production. Also, one employer in Shoe Factories introduced a training programme to improve production and attributed the action to the minimum wage increase. Two other employers in the same industry implemented training programmes to improve the quality of finished products as an adjustment to the new minimum wage.

A number of respondents reported an "intention" to introduce policies in the future to upgrade their work as an offset to the higher minimum wage. For example, two hosiery mills stated that in the future they will hire exclusively skilled workers for skilled jobs as increased wages made the training of learners prohibitive. Three employers in the Children's Clothing Industry reported that they intend to introduce, as an adjustment to the higher minimum wage, a faster assessment of the abilities of new employees. If a new employee does not attain within two weeks a predetermined level of output or show notable progress, he will be dismissed.

Whether such intended actions will be implemented can only be assessed over a longer time period. For the short-run period, November 30, 1968 to January 18, 1969, a comparison of several characteristics for employees laid off and new hires provides a limited insight into whether employers upgrade their work forces as an immediate adjustment. In Table 26, employees laid off or newly hired during the approximate six-week period are distributed by wage class. Among males, a higher proportion of new workers were hired at less than \$1.30 per hour compared with the proportion who were earning below this rate prior to being laid off. For females, the reverse is the case. Approximately one-half of the newly hired females earned less than \$1.30 per hour while 62.9 per cent of the females laid off were in this category. For both males and females, the proportion of new hires in the wage category \$1.30 to \$1.49 per hour is higher than for employees laid off which reflects the influence of the new minimum wage. Overall, however, there is little, if any, evidence in these data that employers in the selected industries substituted more skilled for less skilled workers. In fact, the high proportion of new hires below

Table 26

Distribution of Employees Laid Off and New Hires between November 1968 and January 1969 by Wage Class and Sex for Five Selected Industries, Ontario

	Lai	d Off	New	Hires
Wage Class	Male	Female	Male	Female
Total Workers	58	295	231	618
Under \$1.30	12.3	62.9	14.3	50.2
\$1.30 - \$1.49	17.5	21.8	21.6	35.8
\$1.50 or more	70.2	15.3	64.1	14.0
Total	100.0	100.0	100.0	100.0

Wage data for one male and two female workers in the "new hire" category were not obtained.

\$1.30 per hour, especially among females, suggests employers were hiring many inexperienced workers at the lower minimum learner rate.

In Table 27, workers laid off and new hires are distributed by age. Again, there is no evidence that, at least in the short run, employers have substituted mature, experienced workers for their young inexperienced counterparts. To the contrary, the data suggest that young workers are more heavily represented among new hires compared with employees who have been laid off. For example, females under twenty years of age accounted for 22 per cent of the new hires but constituted only 15.8 per cent of females laid off.

In addition to direct lay-offs or a change in hiring standards, another option open to employers to adjust to higher labour costs is to reduce the work force through attrition. This can be done by eliminating jobs when they become vacant because of voluntary quits or retirement. This aspect was probed by obtaining information on

Table 27

Distribution of Employers Laid Off and New Hires between November 1968 and January 1969 by Age and Sex for Five Selected Industries, Ontario

Age	Laid Off		New Hires ²	
	Male	Female	Male	Female
Total Workers	55	272	219	600
Under 20 years	25.5	15.8	31.5	22.0
20 - 39 years	49.0	64.0	56.6	58.8
40 – 49 years	16.4	14.0	5.5	13.2
50 years and over	9.1	6.2	6.4	6.0
Total	100.0	100.0	100.0	100.0

¹ Information on age for three male and twenty-three female workers in the "laid off" category was not obtained.

whether any jobs filled by employees who either retired or voluntarily left between November 30, 1968 and January 18, 1969 had been eliminated. Altogether, employers in the five industries reported that in this short period, fifty-nine jobs had been eliminated. Of these, forty-six were formerly filled by female workers. However, for only 20 per cent of the fifty-nine cases reported, was the legal minimum wage mentioned as a contributory factor.

Questions were posed on a number of other possible adjustment channels, but few actions were uncovered that could be interpreted as adjustments to offset the higher minimum wage. For example, one might expect a conversion of workers from time rates to piece rates to force an improvement in productivity but no such changes were reported.

² Information on age for thirteen male and twenty female workers in the "new hire" category was not obtained.

A number of establishments reported changes in plant layout, the organization of the flow of work, and purchases of new machinery. However, in most cases, the decision to undertake such changes were made well before the minimum wage revision. In several cases, the minimum wage revision was mentioned as only one variable among others underlying the decision and in others it was completely excluded as a cause. In one establishment where the minimum wage was mentioned as a factor, the flow of work had been improved by distributing to employees batches of clothing of the same size rather than of different sizes.

Improvements in product lines to increase profitability is another possible method of offsetting higher labour costs. A number of product line changes were reported, but it would be extremely dangerous to attribute most of them to the minimum wage revision because the products of the industries under review are fashion oriented. In the short run, only the elimination of some very low price products resulted from the higher minimum wage. Several shoe factories introduced higher priced lines of men's shoes offering higher profit margins. Also, one hosiery mill and two manufacturers of children's clothing introduced a higher priced product line as an offset to the minimum wage revision. A number of firms reported that they would be dropping product lines in the future, but there was no flexibility to do so in the short run.

As a rule, product price increases are the easiest and most frequently applied method for a producer to adjust to increased costs. To isolate those price decisions that are attributable to the increase in the minimum wage is a difficult task because the revision was implemented during a period of general price increases. Also, for the industries analyzed there are additional complications because in many cases price increases are combined with style changes and, consequently, the price increase will be concealed.

Another complication in those cases where the minimum wage was cited as a factor underlying the decision to increase prices is that it was only one of several reasons for making the decision. For example, two shoe manufacturers who increased prices during January 1969 cited minimum wage legislation, increases in raw material prices and other overhead prices as factors underlying their decision.

Generally, the impression gained from these and other producers where price increases were either implemented or planned is that the minimum wage revision was not a prime consideration and price increases would occur even if the minimum wage remained unchanged. Of course, the question that remains unanswered is whether or not price increases would have been smaller if the minimum wage had not been revised.

A number of producers reported that they were not in a position to increase prices in the short run. One firm replied that import competition made price increases impracticable, and, at least in the short run, additional costs would have to be absorbed. However, for most producers who stated they were not in a position to quickly increase prices the reasons given were that quoted prices on existing orders had to be met and that price lists were only revised annually.

In general, employers do not react simultaneously. Many responded during the interviews that it was too early to evaluate fully the impact of the new minimum and to make definite decisions concerning adjustments. Consequently, only through an analysis of the information collected during the follow-up survey (January 1970) can the adjustment aspect be adequately assessed.



